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Remarks/Arguments

Claims 1-20 are pending. Claims 1-20 stand rejected. More particularly, Claims 1, 2, 5, 8 and 14 stand rejected under 35 U.S.C. 102(e) as being anticipated by Tsuria (United States Patent No. 6,178,242). Claim 9 stands rejected under 35 U.S.C. 102(e) as being anticipated by Wasilewski (United States Patent No. 5,870,474). Claims 3, 6-7, 10, 12-13, 17-18 and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria in view of Wasilewski. Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria in view of Cohen (United States Patent No. 5,481,609). Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Wasilewski in view of Tsuria. Claims 15 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bando (United States Patent No. 5,774,548) in view of Kimura (United States Patent No. 6,674,858). Claim 19 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria, in view of Wasilewski and further in view of Smyers (United States Patent No. 5,948,136). Applicants traverse all these rejections for at least the following reasons.

Claims 1-8 and 14

Independent Claim 1 stands rejected under 35 U.S.C. 102(e) as being anticipated by Tsuria (United States Patent No. 6,178,242). All of Claims 2-8 and 14 ultimately depend from independent Claim 1. Applicants traverse the rejections of these Claims for at least the following reasons.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See, M.P.E.P. §2131 citing Verdegaa Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Applicants respectfully submit Tsuria fails to anticipate Claim 1 – as Tsuria fails to teach each of the limitations of Claim 1.

Claim 1 recites:

A method for managing access to a scrambled program, within a network comprising a first device interconnected to a second device, the method comprising:

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- (a) receiving said scrambled program in said first device, said scrambled program comprising a scrambled data component and a descrambling key;
- (b) rebundling, in said first device, said descrambling key using a unique key associated with said first device;
- (c) receiving, in said second device, said scrambled data component and said rebundled descrambling key;
- (d) obtaining in said second device said descrambling key from said rebundled descrambling key; and
- (e) descrambling, in said second device, said scrambled data component using said descrambling key.

Thus, Claim 1 clearly recites steps (a) and (b) are carried out in a first device, while steps (c), (d) and (e) are carried out in a second device. Tsuria fails to teach such a distribution of steps (a) and (b) as compared to steps (c), (d) and (e) across first and second devices. Rather, Tsuria clearly teaches the opposite, in at least that all of its content protective steps are carried out in a single device, i.e., IRD 110.

The Office action first equates IRD 110 of Tsuria to the recited first device of Claim 1, and VCR 130 of Tsuria to the recited second device of Claim 1. *See, 10/18/2005 Office action, par. 2a.* However, each of the relied upon process steps of Tsuria equated in the Office action to the recited steps (d) and (e) are carried out at only the first device, and not the second device, as is clearly recited in present Claim 1.

The Office action relies upon column 10, lines 21-26 of Tsuria to support the assertion that Tsuria teaches obtaining the descrambling key from the rebundled descrambling key. *See, 10/18/2005 Office action, page 3, lines 8-9.* However, lines 21-26 in col. 10 of Tsuria merely recite:

An input SDDS is received (step 205) [in IRD 110]. Each ECM in the input SDDS is replaced with a TECM [in ORD 110], the ECM comprising CW generating information and the TECM also comprising control word generating information for generating the same CW as the ECM (step 210). An output SDDS is thus produced

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[in IRD 110]. The output SDDS is then output (step 215) [from IRD 110].<sup>1</sup>

Thus, the portion of Tsuria relied upon as teaching steps (d) and (e) of pending Claim 1 are actually carried out in what the Office action refers to as the first claimed device – and not the second claimed device (VCR 130), as is explicitly recited by Claim 1. Thus, Tsuria necessarily fails to anticipate pending Claim 1.

By way of further example, the Office action relies upon col. 10, lines 36-40 of Tsuria for the assertion that it teaches descrambling the scrambled data component using the descrambling key. *See, 10/18/2005 Office action, page 3, lines 10-11.* However, lines 36-40 of col. 10 of Tsuria merely recite:

A TECM is generated using a TECM key [in IRD 110], the TECM comprising information for generating the same CW as the ECM (step 230). The TECM is output (step 235) [from IRD 110], and the SDSEG associated with the ECM, and thus also associated with the TECM, is also output (step 240) [from IRD 110].<sup>2</sup>

Again, the relied upon process of Tsuria is carried out in what the Office action refers to as the first claimed device – and not the second claimed device (VCR 130), as is explicitly recited by Claim 1. Accordingly, Tsuria necessarily fails to anticipate pending Claim 1.

In view of the foregoing, Applicants submit Tsuria fails to anticipate Claim 1, as it fails to teach each of the recited limitations thereof – namely, at least recited steps (d) and (e) being carried out at a second device distinct from a first device, where steps (a) and (b) are carried out. Reconsideration and removal of the rejection of Claim 1 as being anticipated by Tsuria is requested.

Applicants also request reconsideration and removal of the rejections of Claims 2, 5, 8 and 14 at least by virtue of these claims' ultimate dependency upon

<sup>1</sup> Lines 21-26 of col. 10 of Tsuria discuss Fig. 4 thereof. Fig. 4 of Tsuria illustrates a simplified flow chart of the operation of the apparatus of Fig. 3 of Tsuria. *See, e.g., col. 10, lines 17-19.* Fig. 3 of Tsuria illustrates a portion of IRD 110 of Fig. 1 thereof. *See, col. 9, lines 36-38.*

<sup>2</sup> Lines 36-40 of col. 10 of Tsuria also discuss Fig. 4 thereof. Again, Fig. 4 of Tsuria illustrates a simplified flow chart of the operation of the apparatus of Fig. 3

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a patentably distinct base Claim 1. For purposes of completeness, Applicants submit the Office action's reliance on Wasilewski and Cohen each fail to remedy at least these shortcomings of Tsuria. Accordingly, Applicants request reconsideration and removal of the rejections of 3, 4, 6 and 7 as well, at least by virtue of these claims' ultimate dependency upon a patentably distinct base Claim 1.

Claim 9

Claim 9 stands rejected under 35 U.S.C. 102(e) as being anticipated by Wasilewski (US Pat No 5870474). Applicants traverse this rejection for at least the following reasons.

Applicants submit that Wasilewski fails to disclose or suggest each and every limitation of present claim 9, and as such, present claim 9 is not anticipated by Wasilewski. Present claim 9 recites in part:

... (a) means for receiving, from a first device coupled to the presentation device via a local network, said scrambled program comprising a scrambled data component and a rebundled descrambling key encrypted using a key associated with the local network;  
(b) a module for decrypting, in said presentation device, said rebundled descrambling key to generate said descrambling key...

Applicants submit that nowhere do the cited portions of Wasilewski disclose or suggest at least the above-cited limitations of claim 9.

Regarding limitations (a) and (b), the Office Action cites Wasilewski column 10, line 9-12 and column 31 - 33 (believed to refer to col. 10, lines 31-33). These portions of Wasilewski state "Thus, a more robust encryption algorithm is prudent. According to the present invention, a public-key encryption algorithm is utilized for this third level encryption" and "The public key corresponding to a particular private key is used to encrypt messages (e.g. MSKs) in the CAM 30 prior to transmission to the STUs 90."

Nowhere does the cited portion mention or suggest a first device coupled to the presentation device via a local network, nor a rebundled descrambling key encrypted using a key associated with the local network. Rather the cited portion

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of Tsuria. *See, e.g., col. 10, lines 17-19.* Fig. 3 of Tsuria illustrates a portion of IRD 110 of Fig. 1 thereof. *See, col. 9, lines 36-38.*

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merely discusses using a public key algorithm scheme. Thus, Applicants submit that Wasilewski fails to disclose or suggest notable limitations of claim 9, and thus claim 9 is not anticipated by Wasilewski.

Claim 11

Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Wasilewski in view of Tsuria. Tsuria is cited as teaching that a scrambled program is prerecorded on media and provided to the access device, the encrypted descrambling key being received from the prerecorded media. The teachings of Tsuria has been discussed hereinabove. For at least the reasons discussed above, applicants submit that Tsuria fails to cure the defect of Wasilewski, and as such, claim 11 is patentably distinguishable over the combination of Wasilewski and Tsuria for at least the same reasons as those discussed above with respect to claim 9.

Claim 10

Claim 10 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria in view of Wasilewski. Applicants traverse this assertion for at least the following reasons.

To establish a *prima facie* case of obviousness, all of the recited claim limitations must be taught or suggested in the prior art. *See, MPEP 2143.03; see also, In re. Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).* Applicants respectfully submit that for reasons analogous to those discussed above, the cited art fails to teach or suggest each of the recited limitations of Claim 10; and hence fails to render Claim 10 unpatentably obvious.

Claim 10 recites:

A method for managing access to a scrambled program received from a service provider within a network having an access device and a presentation device, said method comprising:

(a) receiving said scrambled program in an access device, said scrambled program comprising a scrambled data component and an encrypted descrambling key;

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(b) decrypting, in said access device, said encrypted descrambling key using a key associated with said service provider;

(c) re-encrypting said descrambling key, in said access device, using a public key associated with said access device;

(d) receiving, in said presentation device, said scrambled data component and said re-encrypted descrambling key;

(e) decrypting, in said presentation device, said re-encrypted descrambling key to obtain said descrambling key; and

(f) descrambling, in said presentation device, said scrambled data component using said descrambling key.

Thus, like Claim 1, Claim 10 requires steps (a) and (b) be carried out in an access device (first device), while steps (e) and (f) be carried out in a presentation device (second device). Applicants submit the Office action's reliance upon Tsuria in view of Wasilewski fails to teach, or suggest, at least these limitations.

The Office action relies upon Tsuria in the same manner as the rejection of Claim 1 discussed above. Wasilewski is merely relied upon for its purported teachings regarding using public key cryptography. *See, 10/18/2005 Office action, par. (c) ("[h]owever, Tsuria teaches re-encrypting said descrambling key in said access device but does not disclose expressly using a public key.").* Substituting the public key of Wasilewski for the key of Tsuria fails to remedy the above discussed shortcomings of Tsuria – namely that all of the content protective steps are carried out in a single device in Tsuria, i.e., IRD 110. That is, substituting the public key of Wasilewski for the key of Tsuria fails to remedy that Tsuria fails to teach, or suggest, at least steps (a) and (b) being carried out in an access device (first device) and steps (e) and (f) being carried out in a presentation device (second device). And, instead actually teaches all of its content protective steps are carried out in a single device, IRD 110.

Accordingly, Applicants request reconsideration and removal of the rejection of Claim 10 as being unpatentably obvious over Tsuria in view of Wasilewski.

Claims 12-13

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Claim 12 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria in view of Wasilewski. Claim 13 depends from independent Claim 12. Applicants traverse the rejections of these claims for at least the following reasons.

Claim 12 recites, in part, "(e) recording said scrambled data component and said re-encrypted descrambling key on media coupled to said recording device, and providing said scrambled data component and said re-encrypted descrambling key to a presentation device." Tsuria and Wasilewski, as applied in the Office action, fail to teach, or suggest, such an approach.

Rather, Tsuria expressly teaches supplying a TECM and scrambled data stream to IRD 110, which in turn provides a clear channel signal to a presentation device (television). *See, e.g., Fig. 1*. Again, the Office action merely relies upon Wasilewski for its purported teachings regarding public key cryptography. *See, e.g. 10/18/2005 Office action, page 10, lines 8-12*. Thus, substituting the public key of Wasilewski for the key of Tsuria fails to remedy the above discussed shortcomings of Tsuria – namely that Tsuria expressly teaches the access device, and not a presentation device, receives the TECM and scrambled content.

Accordingly, Applicants submit the Office action's reliance upon Tsuria in view of Wasilewski fails to teach, or suggest, each of the limitations of Claim 12, such that a *prima facie* case of unpatentable obviousness has not been made – at least by virtue that the cited art fails to teach, or suggest, "(e) recording said scrambled data component and said re-encrypted descrambling key on media coupled to said recording device, and providing said scrambled data component and said re-encrypted descrambling key to a presentation device." Accordingly, Applicants respectfully request reconsideration and removal of the rejections of Claims 12 and 13.

#### Claims 15-16

Claims 15 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bando (United States Patent No. 5,774,548) in view of Kimura (United States Patent No. 6,674,858). Applicants traverse these rejections for at least the following reasons. Claim 15 recites, in part, " ... receiving in said security device the scrambled program containing scrambled content information and a descrambling key; **descrambling the scrambled content in the security**

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**device using the descrambling key ..."** (emphasis added). Applicants submit that neither Bando nor Kimura teach or suggest at least the above-emphasized limitation of Claim 15.

The Office Action cites col. 1, lines 33-40 of Bando as teaching the above mentioned limitation of claim 15. Applicants respectfully disagree. The cited portions of Bando merely teaches transmitting a scrambled transport stream, which is scrambled by scrambler 205, and an ECM and an EMM for enabling a receiver to decode the encrypted information. Nothing in the cited portion teaches or suggest the above-cited limitation of claim 15.

Kimura is cited as teaching a security device that generates another scrambling key and re-scrambling the content using the another scrambling key. However, even if the alleged teachings of Kimura are combined with Bando, the suggested combination still fails to cure the defect of Bando as applied to the above-mentioned limitation of claim 15. In view of the above, Applicants again submit that the suggested combination fails to teach or suggest all of the limitations of Claim 15, and as such, Claim 15, and Claim 16, which depends therefrom, are patentably distinguishable over Bando and Kimura. Accordingly, Applicants respectfully request reconsideration and removal of the rejections of Claims 15 and 16.

#### Claims 17-20

Claim 17 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria in view of Wasilewski. All of Claims 18-20 ultimately depend from independent Claim 17. Applicants traverse the rejections of these claims for at least the following reasons.

Claim 17 recites, in part, "[a]n access device, comprising: ... a signal output coupled to a digital bus for transmitting the scrambled data component and the re-encrypted descrambling key to a presentation device via the digital bus, **wherein only a presentation device having a corresponding private key is able to decrypt the re-encrypted descrambling key and descramble the scrambled content.**" Applicants submit Tsuria and Wasilewski, as applied in the Office action, fail to teach, or suggest, such an approach.



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Rather, Tsuria teaches exactly the opposite, that the access device that encrypted the descrambling key is able to decrypt the descrambling key and descramble the scrambled content. See, e.g., col. 9, lines 30-36 ("*It is also appreciated that, during playback of a recording SDDS from the digital VCR 130 through the IRD 110 and associated smart card 120 to the television 100, the IRD 110 and the associated smart card 120 may perform operations similar to those performed on a broadcast SDDS, but using the TECM key rather than the ECM key.*"). Again, the Office action merely relies upon Wasilewski for its purported teachings regarding public key cryptography. See, e.g. 10/18/2005 Office action, page 10, lines 8-12. Thus, substituting the public key of Wasilewski for the key of Tsuria fails to remedy the above discussed shortcomings of Tsuria – namely that Tsuria expressly teaches the access device, and not only a presentation device, is able to decrypt a re-encrypted descrambling key and descramble the scrambled content.

Accordingly, Applicants submit the Office action's reliance upon Tsuria in view of Wasilewski fails to teach, or suggest, each of the limitations of Claim 17, such that a *prima facie* case of unpatentable obviousness has not been made – at least by virtue that the cited art fails to teach, or suggest, "[a]n access device, comprising: ... a signal output coupled to a digital bus for transmitting the scrambled data component and the re-encrypted descrambling key to a presentation device via the digital bus, **wherein only a presentation device having a corresponding private key is able to decrypt the re-encrypted descrambling key and descramble the scrambled content**" – as is recited by Claim 17.

Wherefore, Applicants respectfully request reconsideration and removal of the rejection of Claim 17. Applicants also request reconsideration and removal of the rejections of Claims 18, 19 and 20 as well, at least by virtue of these claims' ultimate dependency upon a patentably distinct base Claim 17. For purposes of completeness, Applicants submit the purported Smyers presentation device authentication fails to add anything to the combined teachings of Tsuria and Wasilewski in these regards. Reconsideration and removal of these rejections is requested.

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### Conclusion

Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicants' attorney at (609) 734-6815, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Respectfully submitted,  
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